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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/815,708 | 04/02/2004 | Jea Yong Yoo | 1740-000095/US | 9728 |
| 30593 7590 10/16/2009 HARNESS, DICKEY & PIERCE, P.L.C. | | | EXAMINER | |
| P.O. BOX 8910 | | | CHOI, MICHAEL P | |
| RESTON, VA | 20195 | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

| Application No. | Applicant(s) | |
|-----------------|--------------|--|
| 10/815,708 | YOO ET AL. | |
| Examiner | Art Unit | |
| MICHAEL CHOI | 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS.

- WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
- after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). werl by the Office later than three n

| earned patent term adjustment. See 37 CFR 1.704(b). |
|--------------------------------------------------------------------------------------------------------------------|
| Status |
| 1) Responsive to communication(s) filed on |
| 2a) This action is FINAL . 2b) This action is non-final. |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
| Disposition of Claims |
| 4) Claim(s) 1.2.4-7.13.17 and 29-42 is/are pending in the application. |
| 4a) Of the above claim(s) is/are withdrawn from consideration. |
| 5) Claim(s) is/are allowed. |
| 6) Claim(s) <u>1,2,4-7,13,17 and 29-42</u> is/are rejected. |
| 7) Claim(s) is/are objected to. |
| 8) Claim(s) are subject to restriction and/or election requirement. |
| Application Papers |
| 9)☐ The specification is objected to by the Examiner. |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. |

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

| Priority under 35 U.S.C. § 119 |
|-------------------------------------------------------------------------------------------------------|
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). |
| a) ☐ All b) ☐ Some * c) ☐ None of: |
| Certified copies of the priority documents have been received. |
| Certified copies of the priority documents have been received in Application No |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage |
| application from the International Bureau (PCT Rule 17.2(a)). |
| * See the attached detailed Office action for a list of the certified copies not received. |

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

| Attachment(s) 1) ⊠ Notice of References Cited (PTC-892) 2) □ Notice of Draftsperson's Patent Drawing Review (PTC-948) 3) ঊ Information To-Sidoclaver Settlement(st) (PTC/956/x8) | 4) Interview Summary (PTO-413) Paper No(s)Mail Date. 5) Action of Informal Pater Lipplication | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|
| Paper No(s)/Mail Date | 6) U Other: | |
| S. Retent and Trademark Office | | |

DETAILED ACTION

Claim Rejections - 35 USC § 103

 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

 Claims 1, 2, 4-7, 13, 17 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saeki et al. (US 6,067,400) in view of Kashiwagi et al. (US 5,923,869 A).

Regarding Claim 1, Saeki et al. teaches a recording medium storing a data structure for managing reproduction data comprising:

- a first area storing a plurality of data playing units, each of the data playing units
 including video data (in at least Fig. 16 video title set having VOB and video title set
 table with PGC and title information to video data, Figs. 6, 17); and
- a second area storing a plurality of navigation information units, each unit corresponding to and for managing one of the data playing unit including the video data (Fig. 16 VOB position information), each navigation information unit including a resume flag indicating whether resumption of reproduction of a corresponding data playing unit of the data playing units at a suspended position is permitted or prohibited (Figs. 6, 7, 11 further clarified in that management pack of VOBU comprising DSI packet wherein each DSI packet contains return addresses to resume reproduction of application, such as movie (Col. 4, lines 51-53) after manually pressing MENU on remote controller, wherein if return address were absent, no resumption from address would be allowed from that

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address; Col. 12, lines 44-55 as well as PCI packets) but fails to explicitly teach the resume flag indicating whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited.

Hamada et al. teaches the resume flag indicating whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0242,0258,0267-0269] – having resume_mode_flag indicating position of last suspension for permitting resumption of playback of last location via resume_switch, Fig. 36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a flag or bit that characterizes the location of video last viewed before stoppage such as a power failure so as to allow user option to continue viewing from such malfunction without having to start over again.

Regarding Claim 2, Saeki et al. teaches the recording medium of claim 1, wherein the corresponding data playing unit is a title (in at least Fig. 16 – program chain and title information table with PGC and title information to video data, Figs. 6, 17).

Regarding Claim 4, Saeki et al. teaches the recording medium of claim 1, wherein the navigation information units is a movie object (in at least Fig. 16 – first layer comprised of video title set with VOB).

Regarding Claim 6, Saeki et al. teaches the recording medium of claim 1, but fails to explicitly teach wherein the navigation information unit further includes commands to conduct operations according to value of the resume flag. Art Unit: 2621

Hamada et al. teaches wherein the navigation information further includes commands to conduct operations according to value of the resume flag (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0238,0242,0258,0267-0269] – having resume_mode_flag having value so as to allow playback via resume switch)

Regarding Claim 7, Saeki et al. teaches the recording medium of claim 1, wherein the resume flag is applied when menu presentation is called during reproduction of the corresponding data playing unit (Col. 24, line 60-Col. 25, line 8 – storing return addresses and resuming current VOBU for menu display) but fails to explicitly teach the resume flag.

Hamada et al. teaches the resume flag (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0242,0258,0267-0269] – having resume_mode_flag indicating position of last suspension for permitting resumption of playback of last location via resume_switch, Fig. 36). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a flag or bit that characterizes the location of video last viewed before stoppage such as a power failure so as to allow user option to continue viewing from such malfunction without having to start over again.

Regarding Claim 13, Saeki et al. teaches a method for recording a data structure for managing reproduction of video data on a recording medium, comprising:

- recording a plurality of data playing unit on the recording medium (Col. 20, lines 31-38 storage of PGC with VOB), each of the data playing units including video data; and
- recording a plurality of navigation information units, each unit corresponding to and for managing one of the data playing units on the recording medium (Fig. 16 – VOB position information stored along with DSI and PCI packets, Col. 12, lines 44-55), each

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navigation information unit including a resume flag which indicates whether resumption of reproduction of a corresponding data playing unit of the data playing units at a suspended position is permitted or prohibited (Figs. 6, 7, 11 – further clarified in that management pack of VOBU comprising DSI packet wherein each DSI packet contains return addresses to resume reproduction of application, such as movie (Col. 4, lines 51-53) after manually pressing MENU on remote controller, wherein if return address were absent, no resumption from address would be allowed from that address; Col. 12, lines 44-55 as well as PCI packets).

Saeki et al. fails to explicitly teach recording on the recording medium and the resume flag which indicates whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited.

Hamada et al. teaches recording on the recording medium (see Abstract, Paragraphs [0062,0110,0112] - recording on medium) and the resume flag indicating whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0242,0258,0267-0269] - having resume_mode_flag indicating position of last suspension for permitting resumption of playback of last location via resume_switch). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have video information including the video data to be recorded onto a medium so as to make data portable to be reproduced at various locations and to have a flag or bit that characterizes the location of video last viewed before stoppage such as a power failure so as to allow user option to continue viewing from such malfunction without having to start over again.

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Regarding Claim 17, Saeki et al. teaches an apparatus for recording a data structure for managing reproduction of video data on a recording medium, comprising:

- a recording unit configured to record a plurality of data playing units on the recording medium, each unit corresponding to and including video data (Col. 20, lines 31-38 – storage of PGC with VOB);
- a controller configured to control the recording unit to record the video data (Fig. 20, 93 control unit; Col. 18, lines 6-15), and
 - o to record navigation information for managing the data playing unit including the video data (Fig. 16 VOB position information stored along with DSI and PCI packets, Col. 12, lines 44-55) on the recording medium (Fig. 20, 93 system control unit), and to record a plurality of navigation information units, each unit corresponding to and for managing one of the data playing units on the recording medium, each navigation information unit includes a resume flag indicating whether resumption of reproduction of a corresponding data playing unit of the data playing units at suspended position is permitted or prohibited (Figs. 6, 7, 11 further clarified in that management pack of VOBU comprising DSI packet wherein each DSI packet contains return addresses to resume reproduction of application, such as movie (Col. 4, lines 51-53) after manually pressing MENU on remote controller, wherein if return address were absent, no resumption from address would be allowed from that address; Col. 12, lines 44-55 as well as PCI packets).

Saeki et al. fails to explicitly teach recording on the recording medium and the resume flag which indicates whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited.

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Hamada et al. teaches recording on the recording medium (see Abstract, Paragraphs [0062,0110,0112] - recording on medium) and the resume flag indicating whether resumption of reproduction of the data playing unit at a suspended position is permitted or prohibited (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0242,0258,0267-0269] - having resume_mode_flag indicating position of last suspension for permitting resumption of playback of last location via resume_switch). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have video information including the video data to be recorded onto a medium so as to make data portable to be reproduced at various locations and to have a flag or bit that characterizes the location of video last viewed before stoppage such as a power failure so as to allow user option to continue viewing from such malfunction without having to start over again.

Regarding Claim 29, Saeki teaches the recording medium of claim 5, wherein the movie object is suspended and maintained when the resumption is permitted (Figs. 6, 7, 11 – each DSI packet contains return addresses to resume reproduction of application, such as movie (Col. 4, lines 51-53) after branching, or suspension, by manually pressing MENU on remote controller with resumption, Col. 24, line 60 - Col. 25, line 25, wherein if return address were absent, no resumption from address would be allowed from that address; Col. 12, lines 44-55 as well as PCI packets).

Regarding Claim 30, Saeki teaches the method of claim 13, wherein the data unit is a title (in at least Fig. 16 – program chain and title information table with PGC and title information to video data, first layer comprised of video title set with VOB; Figs. 6, 17)

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Regarding Claim 31, Saeki teaches the apparatus of claim 17, wherein the data playing unit is a title (in at least Fig. 16 – program chain and title information table with PGC and title information to video data. first layer comprised of video title set with VOB: Figs. 6. 17).

Regarding Claim 32, Saeki teaches the method of claim 31, wherein the navigation information unit is a movie (in at least Fig. 16 – program chain and title information table with PGC and title information to video data, first layer comprised of video title set with VOB; Figs. 6, 17).

Regarding Claim 33, Saeki teaches the method of 30, but fails to explicitly teach wherein the navigation information unit is a movie object.

Hamada et al. teaches wherein the resume flag is recorded in the movie object pertaining to the navigation information (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0238,0242,0258,0267-0269] – having resume_mode_flag recorded within Fig. 35; Paragraph [0226]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such flag recorded within the stream to enable easy navigation when device checks where playback was last left off.

Regarding Claim 34, Saeki teaches the recording medium of claim 5, wherein the movie object is suspended and maintained when the resumption is permitted (Figs. 6, 7, 11 – each DSI packet contains return addresses to resume reproduction of application, such as movie (Col. 4, lines 51-53) after branching, or suspension, by manually pressing MENU on remote controller with resumption, Col. 24, line 60 - Col. 25, line 25, wherein if return address

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were absent, no resumption from address would be allowed from that address; Col. 12, lines 44-55 as well as PCI packets).

Claim 35 is rejected under the same grounds as claims 1 and 13.

Claim 37 is rejected under the same grounds as claim 7.

Claim 38 is rejected under the same grounds as claim 17.

Claim 40 is rejected under the same grounds as claims 3 and 30.

Claim 41 is rejected under the same grounds as claims 4 and 32.

Claim 42 is rejected under the same grounds as claims 1, 16 and 17.

Claim 43 is rejected under the same grounds as claims 29 and 34.

Regarding Claims 36 and 39, Saeki fails to explicitly teaches the method of claim 35, further comprising: storing current reproduction location of the video data, based on value of the resume flag. Hamada et al. teaches storing current reproduction location of the video data, based on value of the resume flag (in at least Figs. 38, 40A-C, 41A-B; Paragraphs [0238,0242,0258,0267-0269] – having resume_mode_flag recorded within Fig. 35; Paragraph [0226]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have such flag recorded within the stream to enable easy navigation when device checks where playback was last left off.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL CHOI whose telephone number is (571) 272-9594. The examiner can normally be reached on M-F (9am - 5:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael Choi Examiner Art Unit 2621

/Marsha D. Banks-Harold/ Supervisory Patent Examiner, Art Unit 2621